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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,030	12/07/2004	Takeshi Oouchida	1018.126101	2771
28075	7590	08/28/2006	EXAMINER	
CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/517,030

Applicant(s)

OOUCHIDA ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,3-7,9-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-7,9-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's arguments filed June 21, 2006, have been fully considered but they are not deemed to be persuasive.

Applicant argues that the shaft 2 of Hayashi et al is supported by bearings 3 and 6, which are supported by different members (1, 8, respectively). This is true, but the bearings relied on are numbered 6 and 7, which are both supported by the same element (8).

Applicant argues that the shaft 15 of Japan 2002-31209 is supported by bearings 41 and 16, which are supported by different members (38, 14, respectively). Applicant's argument is confusing. Claim 14 was interpreted as meaning that there were two bearings on each side, with a single element supporting the two bearings on one side and a single element supporting the other two bearings. This is found in Japan 2002-31209 (bearings 16 and 23 supported by 14; bearings 41 and 42 supported by 38).

But applicant appears to argue that there is a bearing on each side, with each bearing being supported by the same single element. This is not supported by the specification. Fig 1 of the instant application shows first bearings 39 and 38 supported by single first element 28, fixed to housing 26, whereas the second bearings on the other side, 12 and 31, are supported by single second element 23A. Second element is rotationally supported (via bearing 54), by element 29, fixed to housing 26. Therefore, the first and second bearings are not supported by the same single element.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1, 3-6, 13, and 15-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hayashi et al. Hayashi et al discloses a hydrostatic transmission with a combined thrust and radial bearing (6, 16) and a radial bearing (7, 3) supporting a shaft

Art Unit: 3745

(2) at each end of a cylinder block (4), with each group of combined thrust and radial bearing and a radial bearing being supported by a single (integrated) member (8; 1, 15, respectively). Claims 6 and 18 have product by process type limitations, which limitations are defined by the resulting structure. Second swash plate 8 appears to meet the limitations of claims 6 and 18.

Claims 7, 9-12 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Hayashi et al. Hayashi et al discloses all the elements of claims 7-12, as discussed in the above rejection, including that the drive system includes the hydrostatic transmission connected between an engine and a drive unit for a vehicle (e.g. column 10 line 62-65); that the hydrostatic transmission does not allow power from the engine to be disconnected from the drive unit (e.g. column 17 line 59-67); and that the drive unit is a device which inputs turning force from the second swash plate of the second hydraulic system and outputs rotation in a direction identical or reverse of to that of the second swash plate; but does not disclose that there is a device for transmitting or shutting down power to the shaft.

Drive systems for vehicles include clutches between an engine and a transmission, allowing power to be transmitted to or shutting off power through the transmission, to the drive unit. Therefore, inherently, the drive system of Hayashi et al would include a clutch between an engine and a transmission, allowing power to be transmitted to or shutting off power through the transmission, to the drive unit; since the hydrostatic transmission can not do this. If not, it would have been obvious at the time the invention was made to one having ordinary skill in the art to include a clutch between the engine and the hydrostatic transmission of Hayashi et al, allowing power to be transmitted to or shutting off power to the transmission; as a matter of engineering expediency. Since the clutch allows or stops power to the transmission, it allows or stops power to the shaft.

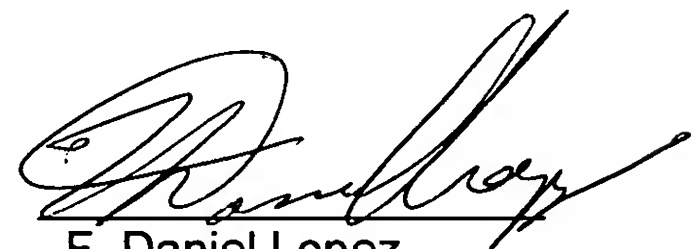
Art Unit: 3745

Claims 13, 15, 17 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Japan 2002-31209. Japan 2002-31209 discloses a bearing (16, 23; 41, 42) supporting a shaft (15) at each end of a cylinder block (25).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', is written over a horizontal line.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
August 22, 2006